

This Annual Report documents our activities that have occurred during the 2019 Fiscal Year (FY), covering July 1, 2018 to June 30, 2019. The mission of John Marshall Soil and Water Conservation District (JMSWCD) is to "provide leadership, technical assistance, information, and education to the citizens of Fauquier County in proper soil stewardship, agricultural conservation methods, and water quality protection so as to ensure the wise use of the county's natural resources." This year's highlights for the District include:

Annual Awards Luncheon - The District held its annual awards luncheon on December 19, 2018 at Stoneridge Events Center in Warrenton. Five awards were presented to local farmers, instructors, contractors, and District partners to acknowledge their work in conservation. Full details can be found on page 6.

Virginia Agricultural Cost-Share Program - During FY 2019, Fauquier County farmers and landowners received \$480,098.78 in cost-share for installing water quality protection practices on their farms. See page 2.

USDA Federal Programs - The Natural Resource Conservation service provided Fauquier landowners with technical assistance to install conservation practices through programs such as EQIP, CRP/CREP, and CSP. See page 3 for details.

TMDL Program - The District's Total Maximum Daily Load grant for the Goose Creek Watershed began in January. Read about our progress for that effort on page 5.

Educational Programs - A total of 5,434 students, parents, teachers, and members of the public participated in educational programs conducted by the District. These programs included Farm Field Days, educational displays, high school water monitoring, and classroom programs that discussed soil and water conservation. See page 4.

Community/Outreach Programs - JMSWCD staff conducted a variety of community and outreach programs including water quality monitoring and our tree planting projects which were conducted for the seventh consecutive year. The District also completed a project under the Virginia Conservation Assistance Program (VCAP). More information on page 5.

Director Changes - In January, Howard Grove stepped down as a director for JMSWCD. Howard started as an associate director in 2009 and served as a director for the past year. Ed Deberry was appointed to fill the District's at-large representative position.

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Cover Photo: A reforested CREP Buffer helps to protect a local stream from nonpoint source pollution. Credit: JMSWCD

Virginia Agricultural Cost-Share Program

Since its formation in 1966, the John Marshall Soil and Water Conservation District (JMSWCD) has been a reliable partner for the farmers and landowners in Fauquier County. For the last 34 years JMSWCD has used two main vehicles to deliver conservation options to our community partners; the Virginia Agricultural Cost Share and Tax Credit Programs. These programs provide financial incentives for the installation of more than 60 different best management practices (BMPs) that improve water quality and conserve valuable soil resources.

Farmers and landowners that implement agricultural BMPs can qualify for reimbursement on allowable expenses, as well as a 25% credit on their Virginia state income taxes for their eligible out-of-pocket expenses. The tax credit can be as much as \$17,500.

To be eligible for cost-share or tax credit through the District, practices must be designed in consultation with JMSWCD staff to meet state and federal specifications, be included in a conservation plan, and be approved by the District Board prior to construction. As of July 2019, JMSWCD has allocated over \$10 million to Fauquier County farmers for the installation of conservation practices.

In FY2018 JMSWCD dispersed \$480,098.78. Half of this funding went towards livestock exclusion practices. Additionally, the District paid out 15% of our funds to cover crops and cropland conversion practices. By all accounts, agricultural conservation is a significant part of the JMSWCD mission and our office looks forward to another productive year of conservation partnership.

2019 Agricultural Program

PRACTICE	DESCRIPTION	INSTALLED	DOLLARS SPENT
Stream Exclusion (SL-6, WP-2, LE-2)	Fences livestock from streams, provides alternative water sources and crossings	25,156 feet of stream bank protected, 25 acres of riparian buffer created	\$243,673.71 Cost-Share \$8,813.25 Tax Credit
Continuing Conservation Initiative (CCI-SE1, CCI- FRB)	Provides incentives to extend the lifespan of livestock exclusion and buffer practices	150,800 feet of stream bank protected, 354 acres of riparian buffer protected	\$159,880 Cost Share
Small Grain Cover Crop (SL-8B, SL-8H)	Small grain, winter cover crop on cropland	1400 acres in cover crops	\$36,403.40 Cost Share
Cropland Conversion (SL-1)	Plants perennial grass on cropland to reduce soil erosion	114.8 acres of grass planted	\$36,395.72 Cost Share \$710.46 Tax Credit
Resource Management Plans (RMPs)	Whole farm planning conservation and nutrient management	150 acres of farmland	\$751.50 Cost-Share
Nutrient Management (NM-1A, NM-5N, NM-5P)	Provides incentives for the efficient use of nutrients	520 acres under management	\$1,540.20 Cost-Share
Summary		175,956 feet of stream bank protected, 3,256 acres of conservation treatment*	\$480,098.78 Cost-Share \$9,644.89Tax Credit

^{*}Includes pastureland covered under the SL-6 grazing land management practice.

USDA Federal Programs

There are several voluntary USDA Natural Resource Conservation Service (NRCS) programs available to landowners and operators in Fauquier County that help provide cost-share assistance to install conservation practices. They are the Conservation Reserve Program and the Environmental Quality Incentive Program.

There are also easement programs available to protect wetlands and farmland. All of these programs for 2019 were funded through the 2018 Farm Bill. These federal dollars would not have been available to landowners/operators without the assistance, and sponsorship of the John Marshall Soil and Water Conservation District.

The Conservation Reserve Program (CRP) is usually piggybacked with another District program called the Conservation Reserve Enhancement Program (CREP). This program encourages landowners to convert highly erodible cropland, marginal pasturelands, or environmentally sensitive acreage to vegetative cover such as warm season-grasses, or mast producing trees. There are 4 CRP/CREP contracts of 39.2 acres in Fauquier which are being renewed.

The Environmental Quality Incentive Program (EQIP) and the Conservation Stewardship Program (CSP) provide landowners with technical assistance to install structural and management conservation practices on eligible agricultural lands. In 2019, three contracts with 27 conservation practices were ap-

proved for landowners, to protect 1,145 acres with \$206,567 federal dollars obligated to Fauquier landowners. Two new CSP contracts were made to landowners for their continued conservation and protection of 89 acres of farm land in Fauquier County.

The Agricultural Conservation Easement Program (ACEP) protects agricultural and forest lands by setting aside environmentally sensitive areas such as grassland meadows or wetland marshes from development. Federal funds were used to restore and enhance 9.6 acres for wetland species. Also, ACEP easements help the County with matching funds to preserve some of their prime farmlands as a resource base for future generations. NRCS has partnered with the Fauquier County PDR program, and the Piedmont Environmental Council to protect farmland acres in the past and hopefully in the future.



Matt with Willowlyn Farms talks with FPAC staff from national headquarters about the benefit of working with NRCS programs have had on his farm

Inter-Agency Cooperation

JMSWCD works closely with several other government agencies to meet its technical and educational goals. Staff from other agencies frequently assist the District in conducting technical field assessments, educational programs, and field days. JMSWCD staff in return, have extended their technical expertise to assist other agencies with their programs.

In the last year, personnel from Virginia Cooperative

Extension, Virginia Department of Forestry, Department of Conservation and Recreation, Fauquier Community Development, and numerous volunteers from local farms, the Fauquier Master Gardeners, and Piedmont Environmental Council have assisted with District programs. District staff have made presentations on best management practices, cost share programs, and stream monitoring, all in an effort to further our common interests and goals.

Educational Programs

JMSWCD conducted conservation education programs for 5,434 individuals in FY 2019.

District employees worked with student and adult audiences, providing information on a variety of conservation topics such as point and nonpoint source pollution, water quality, stream monitoring, soils, and best management practices. Programs are customized to meet each group's needs. This year's educational programs included the following:

High School Water Quality Monitoring

Students from Deb Fisher's Fauquier High School Ecology classes conducted water quality monitoring at Cedar Run. Kara Reffitt's Ecology and AP Environ-



Students measure the diameter of a tree at the Conservation Field Day at Messick Farm.

mental Science classes at Kettle Run High School conducted water quality monitoring on South Run. Students monitored stream velocity, width, depth, turbidity, temperature, pH, nitrates, phosphates, and dissolved oxygen, as well as collecting macroinvertebrates on a monthly basis to assess the ecological health of the streams.

Conservation Field Days

Field days were coordinated for approximately 510 third grade students, teachers, and chaperones in April. The Fauquier Education Farm in Warrenton and the Kinloch Farm in The Plains were the hosts for these educational events. In addition, 165 7th grade students from Taylor Middle School visited the Messick Farm in October. Instructors presented talks on cattle, water quality/macroinvertebrates, soils, forestry, and insects among others.

Educational Displays

JMSWCD personnel set up and staffed educational displays at several events, including the Fauquier County Fair and Sky Meadows State Park Fall Farm Field Days.

Soil Studies

Approximately 500 third grade students received hands-on instruction in soil studies, learning about structure, texture, the soil profile, and soil testing. All students made and took home soil tubes.

Leaf Pack Project

More than 375 students and teachers participated in the Leaf Pack Project which studied macroinvertebrates from local water bodies. This project demonstrates the importance of food chains in streams.

Augmented Reality Sandbox

Over 700 students and teachers saw the District's new Augmented Reality Sandbox in action. Demonstrations on watersheds, landforms, and topography were provided.

Community/Outreach

Web Presence

The District maintains a website hosted through Fauquier County. Our website can be reached by going to: www.johnmarshallswcd.com. The District also maintains a Facebook page which is used to disseminate conservation information. To follow us, go to www.facebook.com/jmswcd.

Water Quality Monitoring

JMSWCD staff and volunteers continued monitoring sites for macroinvertebrates. Streams are monitored quarterly and data entered on the SOS website. Sites on Thumb Run, Carter Run, Marsh Run, and Goose Creek were tested on a monthly basis for *E. coli* in cooperation with DEQ. Bacterial colonies were grown in the office using Coliscan Easygel, and results submitted to DEQ. Streams were also monitored to collect baseline water quality data before new conservation practices are established.

River Access

The District continued working with partners to increase public boating access along the Rappahannock River. The first site at Riverside Preserve Park off of Rt. 688 opened in April.

Tree Planting

Approximately 175 students and adults helped plant/maintain trees on about 4.5 acres of riparian buffer. Students received lessons on how to plant trees and the benefits of trees for water quality.

Community Events

The fifth annual From the Rappahannock, For the Rappahannock event was held at Marriott Ranch in April and was attended by over 110 people. In the morning, volunteers planted trees to restore a riparian buffer and in the afternoon, Rappahannock River oysters were served and tours of the conservation practices were held. Several dignitaries attended including Ann Jennings (Deputy Secretary of Natural Resources) and Del. Michael Webert (VA-18).

Virginia Conservation Assistance Program

The District completed two new contracts (one rain garden and one conservation landscaping) under the Virginia Conservation Assistance Program (VCAP) which focuses on treating erosion and stormwater issues from developed sites. The district also conducted site assessments for 29 other landowners around the county.

Goose Creek TMDL

The Goose Creek Total Maximum Daily Load (TMDL) grant began in January 2019. This is an effort between the district and the Goose Creek Association to improve the water quality in the Goose Creek Watershed. Both the Virginia Department of Environmental Quality and the Goose Creek Association have provided funds for the effort.

During the first six months of the grant, the district completed one LE-1T (Livestock Exclusion with Riparian Buffers) practice for \$8,839.15. This practice protected 1,560 feet of streambank and created 2.2 acres of riparian buffer. Seven other projects have

been approved and are awaiting completion.

The district also completed three education/outreach programs relating to the TMDL grant, reaching 48 local landowners. These programs included cost-share education nights and a presentation to a local horse group.

In addition, the district has also been conducting monthly water quality monitoring for E. coli bacteria in the watershed, collecting a total of 48 samples, 13 of which exceeded the state standard for recreational contact.

2018 AWARDS

Clean Water Farm Award

BLUE RIDGE FARM has completed 11 conservation practices with the District & NRCS since 1995 which has resulted in the protection of 6 miles of streambank. More than 200 acres of the farm has been dedicated to conservation through exclusion fencing & native plant restoration. They hosted JMSWCD's 3rd Grade Farm Field Days & Fauquier County Farm Tours. They have also hosted local schools, for the purpose of

planting native trees & shrubs along streams.

Conservation Farm Award HUSSON LEWIS ENTERPRISES

LLC has installed livestock exclusion practices to protect 2.2 miles of streambank while creating 20 acres of riparian buffer. A final project will add 820 more feet of streambank protection. Tree planting projects were recently completed in the buffers.

Conservation Contractor Award

A&J FENCING (Operated by Alvin & Amos Lantz) has installed over 13 miles of fencing in Fauquier County as part of the Virginia Agricultural Cost-Share Program. Their fences are of superior quality, & landowners appreciate their professionalism & strong work ethic.

Conservation Partner Award

GOOSE CREEK ASSOCIATION has been working in the Goose Creek watershed since 1970. monitor sites currently 21 throughout the watershed. Since 2012, they (with the help of over 240 volunteers) have helped plant over 7,000 trees & shrubs on farms in Fauquier County resulting in the reestablishment of almost 16 acres of riparian buffer.

Edwin F. Gulick Conservation Educator Award

DR. BRIDGETT MCINTOSH has served as a resource & presenter at several horse pasture management seminars & has helped DCR present the *Healthy Land Healthy Horse* course. This has resulted in nearly 6,000 contacts being made through tours, seminars, & presentations to equine organizations.



The John Marshall SWCD award winners with Del. Michael Webert (from left to right) James Spencer (Husson Lewis Enterprises LLC), Dr. Bridgett McIntosh, Del. Michael Webert, Leslie Grayson & Mike Barreda (Blue Ridge Farm), and Marsha Woolman (Goose Creek Association).



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OUR MISSION

THE MISSION of the John Marshall Soil and Water Conservation District is to provide leadership, technical assistance, and education to the citizens of Fauquier County in proper soil stewardship and water quality protection to ensure the wise use of the county's natural resources.

OUR VISION

THE VISION of the John Marshall Soil and Water Conservation District is to serve the citizens of Fauquier County as the leader in ensuring proper stewardship of soil, water and related resources.

SUPPORT

The Fauquier County Board of Supervisors supports the John Marshall Soil and Water Conservation District through an annual contribution and provides administrative assistance through the Department of Finance, the Department of Human Resources, and the IT Department to administer payroll, benefits, personnel matters, and provide IT support.

The Commonwealth of Virginia supports the John Marshall Soil and Water Conservation District through financial and administrative assistance provided by the Virginia Soil and Water Conservation Board and the Department of Conservation and Recreation.

BOARD MEETINGS

The District conducts monthly board meetings to deal with conservation issues and landowner concerns within Fauquier County. The public, as well as cooperating agencies, are invited to attend meetings and provide input. Unless otherwise noted, meetings are held on the second Wednesday of each month at 4:00 pm at the John Marshall Soil and Water Conservation District office at 98 Alexandria Pike, Suite 31 in Warrenton.

All programs and services are offered on a nondiscriminatory basis without regard to race, color, religion, national origin, gender, age, disability, political beliefs, sexual orientation, marital or family status.